

MORPHOMETRIC ANALYSIS OF HISTOARCHITECTURAL CHANGES IN CHOLECYSTITIS.

BACKGROUND:

Cholecystitis appears to be increasing in incidence in India and western world. It is predominantly seen in fatty fertile forty years female. Based on the presence of gall stones, they are classified as calculous and acalculous cholecystitis. In this study, an attempt was made to morphometrically analyse the predominant histoarchitectural changes in both calculous and acalculous cholecystitis with comparison to normal human gall bladders received from autopsy subjects.

METHODS:

In the present study, 75 cases and 75 control gall bladder specimens were obtained, processed and stained with hematoxylin and eosin. After routine histopathological approach, they were subjected to morphometric analysis using IS capture software. Predominant histopathological alterations in various layers of gall bladder were studied and estimated in microns. Finally, the results were expressed in percentage with comparison to control groups.

RESULTS:

Our study showed female preponderance with M: F of 1:7.16. In both calculous and acalculous cholecystitis, changes like epithelial hyperplasia, erosion, intactness, lamina propria thickness, irregularity & gap, R.A sinus and inflammatory infiltrates in each layer were noted and estimated. On the behalf of statistical evidence, both calculous vs control and acalculous vs control are highly significant.

CONCLUSION:

In this morphometric study, all the predominant histopathological changes (except irregularity and gap) were found to be relatively more in calculous cholecystitis than acalculous cholecystitis with comparison to age and gender based control group which showed significantly minimal alterations.

KEYWORDS:

Gall bladder, cholecystitis, gall stones, acalculous, morphometry.